

Claims

1. A deep draw packaging method comprising placing an object (C) in a concave container portion (1) formed through molding of a film with small shrinkability (A) having a residual heat shrinkage rate at 100°C of more than 0 and 15% or less, the film (A) being formed by stretching a film having deep draw moldability and then thermally relaxing the film, the film having a surface which is formed of a heat sealable material and to become the inner wall of the container portion; transferring the concave container portion (1) to a vacuum packaging apparatus (5); placing, on the concave container portion (1), a cover portion (2) formed of a film (B) which can be heat welded to the film with small shrinkability (A); thermally shrinking a side face portion (11) and a bottom face portion (12) of the concave container portion (1) by use of a concave portion heating/shrinking mold (6) such that the side face portion (11) and the bottom face portion (12) come into close contact with the object (C); and sealing an upper peripheral portion (13) of the concave container portion (1) with the film (B) through heating/sealing means (7).

2. A deep draw packaging method according to claim 1, wherein the film with small shrinkability (A) is formed by stretching a film having deep draw moldability at 80 to 95°C with extension ratio of 2.5 to 4.0 times in a machine direction (MD) and with extension ratio of 2.5 to 4.0 times in a transverse direction (TD), and then shrinking the film at 70 to 98°C by 10 to 40% in the MD and by 10 to 40% in the TD.

3. A deep draw packaging method according to claim 1, wherein the film with small shrinkability (A) includes a sealable resin layer (a); a polyamide resin layer (b) which is formed of a polyamide resin having a melting point higher by about 15°C than the temperature for heating the film constituting the concave container portion (1) and which has been stretched and then thermally relaxed; and, if desired, a surface layer (c) formed of a thermoplastic resin.

4. A deep draw packaging method according to claim 2, wherein the film with small shrinkability (A) includes a sealable resin layer (a); a polyamide resin layer (b) which is formed of a polyamide resin having a melting point higher by about 15°C than the temperature for heating the film constituting the concave container portion (1) and which has been stretched and then thermally relaxed; and, if desired, a surface layer (c) formed of a thermoplastic resin.

5. A deep draw packaging method according to any of claims 1 through 4, wherein the object (C) is a processed food.

6. A deep draw packaging method according to any of claims 1 through 4, wherein the film (B) is the film with small shrinkability (A).

7. A deep draw packaging method according to claim 5, wherein the film (B) is the film with small shrinkability (A).

8. A deep draw packaging method according to any of claims 1 through 4, wherein the vacuum packaging apparatus (5) can heat the side portion (11) and the bottom portion (12) of the transferred concave container portion (1) to 70 to 120°C, and can evacuate the space between the concave container portion (1) containing the object (C) and the cover portion (2) formed of the film (B).

9. A deep draw packaging method according to claim 5, wherein the vacuum packaging apparatus (5) can heat the side face portion (11) and the bottom face portion (12) of the transferred concave container portion (1) to 70 to 120°C, and can evacuate the space between the concave container portion (1) containing the object (C) and the cover portion (2) formed of the film (B).

10. A deep draw packaging method according to claim 8, wherein the vacuum packaging apparatus (5) has a structure such that the concave portion heating/shrinking mold (6) comes into close contact with the side face portion (11) and the bottom face portion (12) of the concave container portion (1) after initiation of evacuation.

11. A deep draw packaging method according to claim 9, wherein the vacuum packaging apparatus (5) has a structure

such that the concave portion heating/shrinking mold (6) comes into close contact with the side face portion (11) and the bottom face portion (12) of the concave container portion (1) after initiation of evacuation.

12. A film with small shrinkability for deep draw packaging, which film has a residual heat shrinkage rate at 100°C of more than 0 and 15% or less, and is formed by stretching and then thermally relaxing a film having a surface which is formed of a heat sealable material and to become the inner wall of a container.

13. A film with small shrinkability for deep draw packaging according to claim 12, which film includes a sealable resin layer (a); a polyamide resin layer (b) which is formed of a polyamide resin having a melting point higher by about 15°C than the temperature for heating the film and which has been stretched and then thermally relaxed; and, if desired, a surface layer (c) formed of a thermoplastic resin.